Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 49. (Cancelled)

50. (Currently Amended) A method of ~~preventing or~~ treating ~~an~~ a local inflammatory condition by topical application, the method comprising administering to a mammal in need thereof a ~~prphylactically or~~ therapeutically effective amount of an active enamel substance.

51. (Currently Amended) A method according to claim 50, wherein the active enamel substance is selected from the group consisting of enamelilns, amelogenins, non-amelogenins, praline-rich non-amelogenins, amelins ~~(ameloblastin, sheathlin)~~, tuftelins, and derivatives thereof and mixtures thereof.

52. (Currently Amended) a method according to claim 50, wherein the active enamel substance has a molecular weight of at the most about 120 kDa, ~~such as, e.g., at the most 100 kDa, 90 kDa, 80 kDa, 70 kDa or 60 kDa~~ as determined by SDS Page electrophoresis.

53. (Currently Amended) A method according to claim 50, wherein the amount of active enamel substance applied ~~on the wound is~~ an amount of total protein per cm^2 ~~of affected tissue surface~~ corresponding to from about 0.01 mg/cm^2 to about 20 mg/cm^2, ~~such as from about 0.1 mg/cm^2 to about 15 mg/cm^2~~.

54. Cancelled

55. Cancelled

56. (Currently Amended) The method according to claim ~~55~~ 51, wherein said amelin is ameloblastin or sheathlin.

57. Cancelled

58. (Currently Amended) The method according to claim ~~54~~ 50, wherein the ~~infection is a bacterial infection of~~ local inflammation is of the skin or of a mucosal surface.

59. (Currently Amended) The method according to claim ~~54~~ 50, wherein the ~~bacterial infection is an infection~~ local inflammation is of the oral cavity.

60. (Currently Amended) The method according to claim ~~54~~ 50, comprising administering the active enamel substance to skin, to a mucosa, to a non-oral tissue, to a surgical incision, or to an internal wound.

61. (Original) The method according to claim 60, wherein the mucosa is selected from oral, buccal, nasal, aural, rectal and vaginal mucosa.

62. (Currently Amended) The method according to ~~54~~ 50, wherein the active enamel substance is provided on or in a bandage, dressing, drench, patch, sheet, plaster, pad, soap, stick, sponge, transdermal delivery system, or denture.

63. (Currently Amended) The method according to claim ~~54~~ 50, wherein the active enamel substance is provided in a ~~capsule, tablet, pill, pellet, inhalation device,~~ delivery device, spray, aerosol, shampoo, or enema.

64. (Currently Amended) The method according to claim ~~54~~ 50, wherein the active enamel substance is provided as an implant or a coating of the implant.

65. (Currently Amended) The method according to claim ~~54~~ 50, wherein the active enamel substance comprises a peptide comprising at least one sequence element selected from the group consisting of Asp-Gly-Glu-Ala, Val-Thr-Lys-Gly, Glu-Lys-Gly-Glu, and Asp-Lys-Gly-Glu.

66. (Original) The method according to claim 65, wherein the active enamel substance further comprises an amino acid sequence comprising a consecutive string of 20 amino acids at least 80% identical with a string of amino acids of the same length obtained from a polypeptide comprising SEQ ID NO. 1, amino acids 1 to 103 of SEQ ID NO. 1, or amino acids 6-324 of SEQ ID NO. 2.

67. (New) The method according to claim 52, wherein the active enamel substance has a molecular weight of at the most about 100 kDa.

68. (New) The method according to claim 52, wherein the active enamel substance has a molecular weight of at the most about 90 kDa.

69. (New) The method according to claim 52, wherein the active enamel substance has a molecular weight of at the most about 80 kDa.

70. (New) The method according to claim 52, wherein the active enamel substance has a molecular weight of at the most about 70 kDa.

71. (New) The method according to claim 52, wherein the active enamel substance has a molecular weight of at the most about 60 kDa.

72. (New) The method according to claim 53, wherein the active enamel substance is from about 0.1 mg/cm^2 to about 15 mg/cm^2.